



Tuesday, November 28, 2017 – 02:00 p.m.
CFEL Seminar room III (Bldg. 99)

Binghai Yan

Weizmann Institute of Science, Israel

Nonlinear optical responses of Weyl semimetal materials

In the band structure of a Weyl semimetal (WSM), the conduction and valence bands cross each linearly through Weyl points that are usually treated as “monopoles” of the Berry curvature. As a second-order response, WSMs were very recently demonstrated to show strong nonlinear optical effects including an exotic nonlinear Hall effect. This is caused by the non-equilibrium distribution of the Berry curvature, described as the “dipole” of the Berry curvature. In this talk, I will talk about our recent computational results on nonlinear response for representative WSM materials TaAs and MoTe₂.

Host: Angel Rubio

